

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for transferring multimedia information from a source location to a destination location through one or more networks, the system comprising:

a source output adapted to provide a first stream of information in a first protocol characterized by one of a plurality of source capabilities;

a destination input adapted to receive a second stream of information in a second protocol characterized by one of a plurality of destination capabilities;

a proxy transcoder server ("PTS") coupled between the source output and the destination input, wherein the PTS is adapted to perform transcoding of multimedia system protocols, one or more audio streams, and one or more video streams, the multimedia system protocols selected from the group consisting of H.323, H.324, and SIP, the PTS comprising:

a capability exchange module adapted to:

~~perform a capability exchange process defined by the first protocol to provide one source capability of the plurality of source capabilities;~~ determine a first set of common capabilities between the PTS and a source terminal associated with the first stream of information through a first capability negotiation process;

~~determine one or more characteristics of a media channel coupled to the source output and adapted to support the first stream of information, the one or more characteristics associated with the one source capability of the plurality of source capabilities;~~ and a second set of common capabilities between the PTS and a destination terminal associated with the second stream of information through a second capability negotiation process; and

identify one destination capability of the plurality of destination capabilities;

a selection module adapted to select a transcoding process based upon the ~~one source capability of the plurality of source capabilities and the one destination capability of the~~

~~plurality of destination capabilities~~ first set of common capabilities and the second set of common capabilities;

a media channel processing module adapted to calculate a quality measure independent of feedback from the destination terminal associated with the second stream of information;

a rate control module coupled to the media channel processing module adapted to vary an output bit rate in an existing session associated with the second stream of information;
and

a real-time transcoding module coupled to the rate control module and adapted to use the selected transcoding process and the output bit rate to process the first stream of information.

2. (Previously Presented) The system of claim 1 wherein the one or more networks are selected from a group comprising the Internet, a mobile network, a wide area network, a local area network, PTSN, ISDN, and SONET.

3. (Previously Presented) The system of claim 1 wherein the source output is in a first device different than the PTS and the destination input is in a second device different than both the first device and the PTS.

4. (Previously Presented) The system of claim 3 wherein the capability exchange module identifies at least one of the output and input of the first device, based on information stored in the device, based on user subscription information stored in a network database of the user's service provider, based on in-band information command and control within a stream exchanged, or pre-set by the service provider.

5. - 8. (Canceled).

9. (Currently Amended) The system for ~~claim 6~~ claim 1 wherein the rate control module detects the ~~network status information~~ quality measure by using in-band bit-rate instructions.

10. (Currently Amended) The system for ~~claim-6~~ claim 1 wherein the rate control module regulates the ~~data~~ output bit rate by changing transcoding parameters.

11. (Currently Amended) The system for ~~claim-6~~ claim 1 wherein the rate control module regulates the ~~data~~ output bit rate by instructing network equipment to give a higher priority to data being handled by the PTS than other data.

12. - 13. (Canceled).

14. (Original) The system of claim 1 wherein the PTS further comprising a network addressing module to determine the network address of the source output and the network address of the destination input.

15. (Canceled).

16. (Currently Amended) The system of claim 1 wherein the PTS further ~~comprising~~ comprises an intellectual property rights management module to manage and process information on intellectual property rights.

17. (Currently Amended) The system of claim 1 wherein the PTS further ~~comprising~~ comprises an encryption and decryption process to encrypt and decrypt the data.

18. (Currently Amended) The system for ~~claim-6~~ claim 1 wherein the rate control module regulates the ~~data~~ output bit rate dynamically and in real time.

19. (Currently Amended) The system of claim 1 wherein the real-time transcoding module ~~[[are]]~~ is programmable to transcode between various types of capabilities for the source output and various types of capabilities for the destination input.

20. (Currently Amended) A system for transferring multimedia information from source to destination locations through one or more networks, the system comprising:

a source output coupled to a first network and adapted to provide a first stream of information, wherein the source output is adapted to support a first protocol selected from the group consisting of H.323, H.324, RTSP, and SIP;

a destination input coupled to a second network and receiving a second stream of information, wherein the destination input is adapted to support a second protocol selected from the group consisting of H.320, H.323, H.324, and SIP;

a proxy transcoder server ("PTS") coupled between the source output and the destination input, the proxy transcoder server comprising:

a capability exchange process coupled to the source output, the capability exchange process being adapted to identify the first protocol supported by the source output, determine one or more characteristics of a media channel coupled to the source output utilizing a message-based command and control protocol for negotiation in the capability exchange process, wherein the media channel is adapted to support the first stream of information, and adapted to identify the second protocol supported by the destination input;

a transcoding process coupled to the capability process, the transcoding process comprising a plurality of transcoding modules numbered 1 through N, where N is an integer greater than 1, the transcoding process being adapted to select one of the plurality of transcoding modules based upon the first protocol and the second protocol; and

a bit rate control process coupled to the transcoding process, the bit rate control process being adapted to receive a first network status information from the first network, ~~the bit rate control being adapted~~ indicator to adjust a status state of the second stream of information based upon the first network status indicator independent of feedback from a destination terminal associated with the second stream of information.

21. (Currently Amended) The system of claim 20 wherein the first network status information indicator comprises a ping measure of quality of media carried through the first network.

22. - 27. (Canceled).

28. (Previously presented) The system of claim 1 wherein the H.324 multimedia system protocol comprises 3GPP-324M.

29. (Previously presented) The system of claim 20 wherein at least one of the first protocol or the second protocol is 3GPP-324M.

30. (Canceled).

31. (Previously presented) The system of claim 1 wherein the capability exchange process utilizes H.245.

32. (Previously presented) The system of claim 1 wherein the capability exchange process utilizes SDP.

33. (Previously presented) The system of claim 1 further comprising:
a second source output adapted to provide a third stream of information in the first protocol characterized by one of a plurality of source capabilities; and
a second real-time transcoding module adapted to use a second transcoding process to process the third stream of information, wherein:
the capability exchange module is further adapted to determine one or more characteristics of a second media channel coupled to the second source output and adapted to support the third stream of information; and
the selection module is further adapted to select the second transcoding process.

34. (Currently Amended) The system of claim 33 wherein the first media channel comprises a video channel and the second media channel comprises an audio channel.

35. (Previously Presented) The system of claim 1 wherein the second stream of information comprises a transcoded stream of media converted for transport in the second protocol.

36. (Previously Presented) The system of claim 1 further comprising performing a second capability exchange process defined by the second protocol to provide one destination capability of the plurality of destination capabilities.

37. (Previously Presented) The system of claim 36 wherein the second capability exchange process translates one or more of the plurality of source capabilities to provide one or more of the plurality of destination capabilities.

38. - 41. (Canceled).

42. (New) The system of claim 20 wherein the state of the second stream of information comprises at least one of stop, prioritize allow, or adjust bit rate.